(No Model.)

C. BROWNING.

CIGAR BUNCH ROLLER.

No. 428,451. Patented May 20, 1890.

Fig. I.

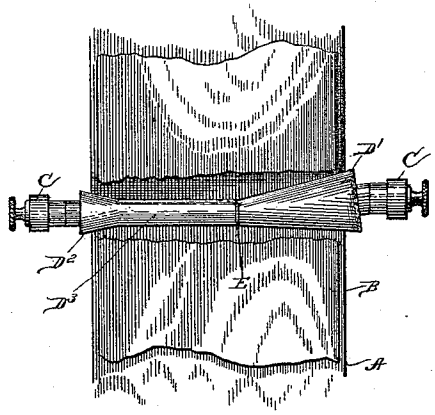


Fig. II.

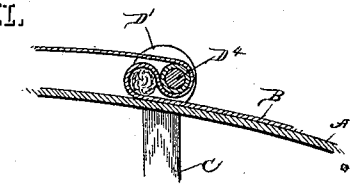


Fig. III.

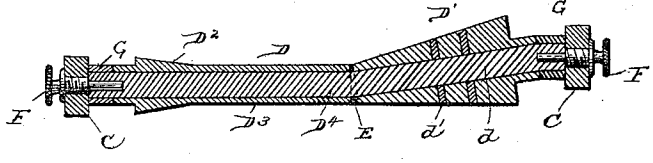
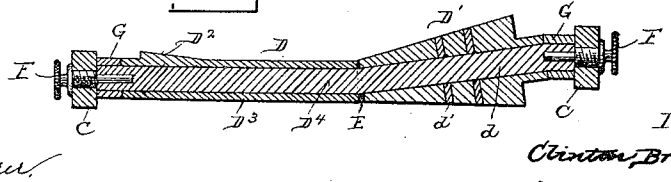


Fig. IV.



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UNITED STATES PATENT OFFICE.

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CIGAR-BUNCH ROLLER.

SPECIFICATION forming part of Letters Patent No. 428,451, dated May 20, 1890.

Application filed January 14, 1890. Serial No. 336,897. (No model.)

To all whom it may concern:

Be it known that I, CLINTON BROWNING, a citizen of the United States, residing at Shoustown, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Cigar-Bunch Rollers, of which the following is a specification.

My invention relates to a roller employed in cigar-bunch machines, so constructed as to prevent the kinking or lapping of the apron during the act of rolling the bunch; and it consists in certain features of novelty to be hereinafter described, and then particularly pointed out in the claims.

In order that my invention may be fully understood, I will proceed to describe the same with reference to the accompanying drawings, in which—

Figure I is a plan view showing the roller, together with the rolling-table and apron. Fig. II is a sectional view thereof. Fig. III is a longitudinal section of the roller. Fig. IV is a similar section of a modification.

In the drawings, A represents a rolling-table, and B an apron. The bunching-roller is mounted in reciprocating arms C. The front or forward edge of the roller D is practically straight, or nearly so, so that it naturally gathers the bunch properly; but the roller is of irregular shape, as shown, having the stationary or non-rotating enlargement or conical sleeve D′, which extends with a gradually-increasing diameter to the end of the roller, which serves to form the tip or mouth end of the cigar. The shaft D^4 has a bent portion *d*, that receives the conical sleeve D′, held thereon by screws or other fastenings *d*′, with the larger end of the sleeve near the end of the shaft, so that the inequality or enlargement of the roller is at its rear side, and this permits the front face thereof to be formed in substantially the same line as the rest of the roller, while this increased diameter at this end of the roll acts to take up the apron, as it requires a greater portion thereof to wrap around the enlargement, and consequently reduces the size of the apron, inclosing the mouth portion of the cigar-bunch, and therefore this enlargement or sleeve D′ prevents the kinking or the lapping of the apron during the rolling operation. It is evident that the conical sleeve may be made loose on the shaft, so as to rotate or turn thereon. A similar construction may be employed to form the other end of the cigar, such as the conical enlargement D^2 of the rotary sleeve D^3, if it is desired to reduce the diameter in that part, and that enlargement may be made stationary and thrown to one side, as shown in Fig. IV, so that the base-line of the roller is practically straight, as above set forth. The sleeves may be separated by a washer or collar E. The shaft D^4 is attached to the arms C by fastenings F passing from the arms into the ends of the shaft. Interposed between the sleeves and the arms C are the collars G.

By the movement of the bunch-roller D the filler is gathered within the apron and the bunch-roller forces the apron to travel over the rolling-table and compact the bunch and wrap the binder around the same, the enlarged portion D′ of the roller gathering up the extra part of the apron forming the mouth portion of the cigar, and so contracting this part of the space within the apron, and at the same time preventing the forming of any wrinkles or laps in the apron, and imparting the gradually-increasing diameter to the bunch from the mouth portion toward the body of the cigar, wrapping the binder evenly around the bunch and imparting the proper shape to the cigar.

On account of the peculiar shape above described of the bunch-roll, I am enabled to impart the proper shape to the cigar-bunch and wrap the binder around the same without fear of cutting the binder on account of the laps or kinks in the apron by taking up on an enlarged portion of the roll all the extra part of the apron which might be liable to cause such action.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the apron of a cigar-bunch machine, of a bunch-roller con-

structed with a bent non-rotating shaft, a conical sleeve or enlargement thereon at the bent end, and a sleeve at the other end having an enlargement D^2, such sleeves being so arranged on the shaft as to impart a substantially straight face to one side of the roller and an angular or irregular face to the other side to form the required taper on the cigar-bunch, substantially as set forth.

2. The combination, with the apron of a cigar-bunch machine, of a bunch-roller consisting of a suitable shaft, a part D′ thereon being stationary or non-rotating, and another part D^3 having an enlargement D^2 and mounted on the shaft to turn with the apron, substantially as and for the purpose set forth.

3. The combination, with the apron of a cigar-bunch machine, of the bunch-roller consisting of a shaft, an enlarged stationary part on one side thereof, and a loosely-mounted part having an enlargement D^2, substantially as and for the purpose set forth.

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